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Time-Dependent Boundary Conditions for Large Eddy Simulation TRAIAN ILIESCU, JEFF BORGGAARD, ALEXEY MIROSHNIKOV, Virginia Tech — We present a new boundary treatment for Large Eddy Simulation of flows with time-dependent boundary conditions. The approach uses approximate deconvolution to approximate the velocity near the boundary. With these approximations and the exact value of the velocity at the boundaries, the method computes the approximation for the filtered velocity at the boundaries at the new time-step. We illustrate the new method in the numerical simulation of three-dimensional channel flows with time-dependent boundary conditions.

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